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(54) Title: A PHOSPHA-ADAMANTANE (S) CATALYTIC SYSTEM

(57) Abstract: A catalyst system capable of catalysing the carbonylation of an olefinally unsaturated compound is described. The catalyst system is obtainable by combining: (a) a metal of Group VIB or Group VIII B or a compound thereof; and (b) a bidentate phosphine of general formula (I) $Ad)_s(CR^4R^5R^6)_T Q^2\text{-}A\text{-}(K, D)\,Ar\,(E, Z)\text{-}B\text{-}Q^1(Ad)_u(CR^1R^2R^3)_v$. Ad represents an optionally substituted adamantyl radical bonded to the phosphorous atom via any one of its tertiary carbon atoms. A method of production of the catalyst is also illustrated.

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